

Water-Efficient Labeling and the Large Utility

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Water Conservation Program

Advantages of Water Efficiency Labeling

- ✦ *Consumer awareness*
- ✦ *Program savings and symbiosis*
- ✦ *Market transformation*

Consumer Awareness

- *Currently little information available on water efficiency*
- *Few products show water usage*
- *Uninformed choices lead to water waste and market inefficiencies*
- *Higher visibility would increase customer awareness of overall need for water conservation*

Program Savings/Symbiosis

- ✦ *Less research required to run a program*
- ✦ *Easier marketing*
- ✦ *Reduce barriers to small utilities, allowing more to implement conservation programs*

Market Transformation

- *Increased information leads to better informed choices*
- *Increase demand for efficient products, driving market away from wasteful products*

Past Indicator of Success

- ▶ *Energy Policy Act of 1992*
 - ▶ *Created savings for all utilities*
 - ▶ *Savings were built into Senate Bill 1 projections*
 - ▶ *Only conservation that many small utilities can manage*

Lesson Learned

- ★ *Durability of both product and savings and performance of product should be part of testing process*

Will Labeling Work for Commercial Products

- *Not in the same way as retail labels for residential products*
- *Perhaps in product catalogues or as a sales tool*

Potential Savings from Labeling Commercial Products in Austin

- ★ *Large commercial laundry equipment*
- ★ *Commercial dishwashers*
- ★ *Commercial ice machines*
- ★ *Dental and medical vacuum pumps*
- ★ *Food steamers*
- ★ *Pre-rinse spray valves*

Commercial Laundry Equipment

- *Current machines average approx. 3 gal per pound*
- *Water Star: <2.5 gallons per pound*
- *Approx. 600 machines in Austin*
- *Increasing efficiency from 3.0 to 2.5 gallons per pound would save over 300,000 gallons per day*

Commercial Dishwashers

- *Currently use 1 to 5 gallons per rack*
- *Water Star: <1.3 gallons per rack*
- *Approx. 2500 machines in Austin*
- *Increasing efficiency by .25 gallons per rack would save 22,000 gallons per day*

Commercial Ice Machines

- ★ *Current machines use 12 to 400 gallons per 100 lbs of ice*
- ★ *Water Star: <19 gallons/100 lbs of ice; no water cooled machines*
- ★ *Approx 6,000 machines each making an average of 500 pounds a day*
- ★ *Savings of just 3 gallons per pound would save 90,000 gallons per day*
- ★ *Eliminating water cooled machines would increase savings to 150,000 gallons per day*

Dental and Medical Vacuum Pumps

- *Liquid Ring pumps use approx. 750 gallons per day*
- *Water Star: vacuum pumps that do not use water*
- *Approximately 150 liquid ring pumps in dental offices in Austin*
- *Replacing with vacuum pumps would save 112,500 gallons per day*

Food Steamers

- ★ *Boiler types use 20 to 50 gallons/hour*
- ★ *Water Star: boilerless, use about 1 qt./hr*
- ★ *Approx 1,000 in Austin; half are boiler types*
- ★ *Replacing boiler steamers would save over 150,000 gallons per day*

Pre-rinse Spray Valves

- *Current valves use 1 to 6 gpm*
- *Water Star: <2 gallons per minute*
- *Approx 2500 in Austin*
- *Replacing with efficient valves, saving 100 gallons per day, would save 250,000 gallons per day*

Potential Savings from Residential Product Labeling

- ▶ *Showerheads*
- ▶ *Toilets*
- ▶ *Clotheswashers*
- ▶ *Dishwashers*
- ▶ *Irrigation Systems*

Showerheads

- ✦ *Current standard: 2.5 gpm*
- ✦ *Water Star: 1.5-2.0 gallons per minute*
- ✦ *Approx 270,000 showerheads in Austin*
- ✦ *Savings of 1,900,000 gallons per day*

Toilets

- ★ *Current standard: 1.6 gpf; no flapper standard*
- ★ *Water Star:*
 - ★ *Level 1: high performance 1.6 gpf with standard replacement flapper*
 - ★ *Level 2: Dual flush*
 - 1.6 gpf with standard replacement flapper*
 - 0.8-1.0 gpf short flush*
- ★ *Savings would depend on mix installed, with high performance toilets saving .5-2.5 gpf and dual flush toilets saving 25% over 1.6 gpf*

Clotheswashers

- ▶ *Current standard: 9.5 water factor in 2007*
- ▶ *Water Star:*
 - ▶ *Level 1: 8.5 water factor*
 - ▶ *Level 2: 7.0 water factor*
 - ▶ *Level 3: 6.0 water factor*

Dishwashers

- ★ *No current water standard-washers use 5-12 gallons per normal load*
- ★ *Water Star:*
 - ★ *Level 1: 6 gallons/cycle*
 - ★ *Level 2: 4 gallons/cycle*

Irrigation Systems

- *No current standards*
- *Water Star:*
 - *Level 1: maximum system output of 80% of ET without customer adjustment*
 - *Level 2: maximum system output of 60% of ET without customer adjustment*
 - *Durability and sustainability of savings very important*

Water efficient labeling will be an effective method for promoting water efficiency for some products. Further analysis will determine which products provide the best opportunity.